

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S) : David Szymanski

TITLE : WOOD CUTTING SAW CHAIN AND
REPLACEABLE CUTTING
MEMBERS

APPLICATION NO. : 10/780,323

FILED : 02/17/2004

CONFIRMATION NO. : 1107

EXAMINER : Clark F. Dexter

ART UNIT : 3724

LAST OFFICE ACTION : April 8, 2009

ATTORNEY DOCKET NO. : INDI 2 00002

RESPONSE TO A NON-COMPLIANT APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Responsive to the Notice of Non-Compliant Appeal Brief mailed April 8, 2009, on the above-referenced patent application, Applicant(s) hereby submit pages 3 (Status of the Claims), 4 (Status of Amendments), 5-7 (Summary of Claimed Subject Matter), and 15-19 (Claims Appendix).

CONCLUSION

The foregoing submission is believed to meet the requirements of the Notification of Non-Compliant Appeal Brief, and the Applicant awaits further action on the application from the Patent and Trademark Office.

Respectfully submitted,

Fay Sharpe LLP

A handwritten signature in black ink, appearing to read 'Scott A. McCollister', is written over a horizontal line.

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May 7, 2009
Date

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III. STATUS OF CLAIMS

The status of the claims set forth in the Office Action mailed on February 06, 2008 was, and is, as follows:

Claims 1-3, 5-10, 12-16, 18-20, 23 and 24 are on appeal.

Claims 1-3, 5-10, 12-16, 18-20, 23 and 24 are pending.

Claims 1-3, 5-10, 12-16, 18-20, 23 and 24 are rejected.

Claims 4 and 28 are cancelled.

Claims 11, 17, 21, 22, 25-27, 29 and 30 are withdrawn from consideration.

IV. STATUS OF AMENDMENTS

An Amendment After Final Rejection was filed on November 5, 2008. In an Advisory Action dated April 8, 2009, the Examiner refused to enter the proposed amendments on the grounds that the amendments raise new issues that would require further consideration.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present application is directed toward a quick change cutting link of a saw chain for cutting wood.

Independent claim 1 is directed to a quick change cutting link 12 (Figs. 1, 6, 7 and 8, page 8, line 2) for a saw chain for cutting wood (page 9, lines 1-3) including a base member 16 (Fig. 1, page 8, line 5) adapted to be pivotally connected to other links (page 8, line 3) of the saw chain, which includes a seat surface 26 having a first taper (Fig. 3, page 9, lines 8-9). The quick change cutting link 12 further includes a cutting member (Figs. 2-5, page 9, line 8) that comprises a cutting edge 34 (Fig. 1-3, 6 and 8, page 9, line 15) and releasably engages the base member 16. The cutting member includes a surface 24 having a second taper (Fig. 3, page 9, lines 8-9). The surface 24 having the second taper is constructed from sintered and compacted particles of abrasion resistant material (page 11, lines 17-19), the first taper and said second taper extend at an angle ranging from about 0.5° to about 45° (page 10, line 2) relative to a direction of chain travel at a close tolerance effective to cause self-locking engagement (page 10, lines 3-4) of the first taper of the seat surface 26 and the second taper of said cutting member surface 24.

Independent claim 15 is directed to a quick change cutting link 12 for a saw chain for cutting wood (Figs. 1 and 6-8, page 9, lines 1-3), comprising a base member 16 adapted to be pivotally connected to other links of the saw chain (page 8, line 3), said base member 16 comprising a seat surface 26 (page 9, line 9); and a cutting member (Figs. 2-5, page 9, line 8) that comprises a cutting edge 34 (Fig. 1-3, 6 and 8, page 9, line 15) and releasably engages said seat surface 26 of said base member 16, wherein said cutting member and seat surface 26 each consists essentially of sintered and compacted particles of abrasion resistant material (page 11, lines 11-12).

Independent claim 16 is directed to a quick change cutting member for a saw chain for cutting wood (Figs. 1 and 6-8, page 9, lines 1-3), comprising a cutting edge 34 (Fig. 1-3, 6 and 8, page 9, line 15) and an interior recess 54 (Fig. 5, page 10, lines 15-16) having a surface 60 having a taper extending at an angle ranging from about 0.5° to about 45° relative to a direction of travel of said cutting member when fastened on a chain (page 10, lines 26-17), said taper having a close tolerance comprising no more than 0.5° to a mating taper of a base member 16 (page 10, lines 4-6), wherein said cutting member consists essentially of sintered and compacted particles of abrasion resistant material (page 11, lines 11-12).

Independent claim 18 is directed to a base member 16 of a cutting link 12 for a saw chain for cutting wood (page 8, line 5), said base member being adapted to be pivotally connected to other links of the saw chain (page 8, line 5), said base member 16 comprising a seat surface 26 having a taper (Fig. 3, page 9, line 9) extending at an angle ranging from about 0.5° to about 45° relative to a direction of travel of the base member when fastened on the chain (page 10, lines 2-4), said taper having a close tolerance comprising no more than 0.5° to a mating taper of a cutting member (page 10, lines 4-7) wherein said base member 16 consists essentially of sintered and compacted particles of abrasion resistant material (page 11, lines 11-12).

Independent claim 19 is directed to a quick change cutting link 12 for a saw chain for cutting wood (Figs. 1 and 6-8, page 9, lines 1-3), comprising a base member 16 adapted to be pivotally connected to other links of the saw chain (page 8, line 5), said base member 16 comprising a seat surface 26 having a first taper (page 9, line 9) and a stop surface 32 (page 9, line 12) located upstream of said seat surface relative to the direction of travel of the chain; and a cutting member (page 9, line 8) that comprises a cutting edge 34 (Figs. 1-3, 6 and 8, page 9, line 15) and releasably engages said seat surface 26 of said base member 16, said cutting member including a surface 24 having a second taper (Fig. 3, page 9, lines 8-9), wherein said first taper and said second taper extend at an angle ranging from about 0.5° to about 45° relative to a direction of chain travel (page 10, lines 2-3) at a close tolerance effective to cause locking engagement of said first taper of said seat surface 26 and said second taper of said cutting member surface 24 (page 10, lines 3-7), and said cutting member comprises sintered and compacted particles of abrasion resistant material (page 11, lines 11-12).

APPENDICES

CLAIMS APPENDIX

Claims involved in the Appeal are as follows:

LISTING OF THE CLAIMS

1. (Previously Presented) A quick change cutting link for a saw chain for cutting wood, comprising a base member adapted to be pivotally connected to other links of the saw chain, said base member comprising a seat surface having a first taper; and a cutting member that comprises a cutting edge and releasably engages said base member, said cutting member including a surface having a second taper, said surface having the second taper constructed from sintered and compacted particles of abrasion resistant material, wherein said first taper and said second taper extend at an angle ranging from about 0.5° to about 45° relative to a direction of chain travel at a close tolerance effective to cause self-locking engagement of said first taper of said seat surface and said second taper of said cutting member surface.

2. (Previously Presented) The quick change cutting link of claim 1 wherein said close tolerance comprises no more than about 1° .

3. (Previously Presented) The quick change cutting link of claim 1 wherein said close tolerance comprises no more than 0.5° .

5. (Previously Presented) The quick change cutting link of claim 1 wherein said base member comprises stamped metal.

6. (Original) The quick change cutting link of claim 1 wherein said base member comprises sintered and compacted particles of abrasion resistant material.

7. (Previously Presented) The quick change cutting link of claim 1 wherein said abrasion resistant material comprises at least one of metal and ceramic.

8. (Original) The quick change cutting link of claim 7 wherein said abrasion resistant

material comprises a carbide containing compound.

9. (Original) The quick change cutting link of claim 8 wherein said carbide containing compound comprises a compound selected from the group consisting of tungsten carbide, silicon carbide, tantalum carbide and aluminum carbide.

10. (Previously Presented) The quick change cutting link of claim 1 wherein said abrasion resistant material comprises a tool steel alloy.

12. (Original) The quick change cutting link of claim 1 wherein at least one of said cutting member and said base member comprises a water-resistant material applied by a process selected from the group consisting of steam treatment, resin infiltration, copper infiltration and loctite infiltration.

13. (Original) A saw chain comprising a plurality of the quick change cutting links of claim 1.

14. (Previously Presented) The saw chain of claim 13 wherein said saw chain is adapted for use on a saw comprising one of a chain saw, a timber harvester, a buck saw and a saw for cutting wood pallets.

15. (Previously Presented) A quick change cutting link for a saw chain for cutting wood, comprising a base member adapted to be pivotally connected to other links of the saw chain, said base member comprising a seat surface; and a cutting member that comprises a cutting edge and releasably engages said seat surface of said base member, wherein said cutting member and seat surface each consists essentially of sintered and compacted particles of abrasion resistant material.

16. (Previously Presented) A quick change cutting member for a saw chain for cutting wood, comprising a cutting edge and an interior recess having a surface having a taper extending at an angle ranging from about 0.5° to about 45° relative to a direction of travel of said cutting member when fastened on a chain, said taper having a close tolerance comprising no more than 0.5° to a mating taper of a base member, wherein said cutting member consists essentially of sintered and compacted particles of abrasion resistant material.

18.(Previously Presented) A base member of a cutting link for a saw chain for cutting wood, said base member being adapted to be pivotally connected to other links of the saw chain, said base member comprising a seat surface having a taper extending at an angle ranging from about 0.5° to about 45° relative to a direction of travel of the base member when fastened on the chain, said taper having a close tolerance comprising no more than 0.5° to a mating taper of a cutting member, wherein said base member consists essentially of sintered and compacted particles of abrasion resistant material.

19. (Previously Presented) A quick change cutting link for a saw chain for cutting wood, comprising a base member adapted to be pivotally connected to other links of the saw chain, said base member comprising a seat surface having a first taper and a stop surface located upstream of said seat surface relative to the direction of travel of the chain; and a cutting member that comprises a cutting edge and releasably engages said seat surface of said base member, said cutting member including a surface having a second taper, wherein said first taper and said second taper extend at an angle ranging from about 0.5° to about 45° relative to a direction of chain travel at a close tolerance effective to cause locking engagement of said first taper of said seat surface and said second taper of said cutting member surface, and said cutting member comprises sintered and compacted particles of abrasion resistant material.

20. (Previously Presented) The quick change cutting link of claim 19 wherein said close tolerance comprises no more than 0.5° .

23. (Original) The quick change cutting link of claim 19 wherein said first taper and said second taper extend upwardly or downwardly from a location near said cutting edge in a direction opposite to said direction of chain travel.

24. (Original) The quick change cutting link of claim 19 wherein said angle is about 10 degrees or less.